

**REMARKS**

Claims 1, 3-8, as amended above, and new claims 9-11 are the only active claims pending in this application. The foregoing separate sheets marked as "Listing of Claims" shows all the claims in the application, each with an indication at its first line showing its current status.

**I. Rejections Based on Prior Art****Claims 1 and 5-7**

Claims 1 and 5-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,436,058 ("Krahner"). See Office Action, at pages 2-3.

Applicants respectfully traverse all of these rejections, on the grounds that Krahner, read in its entirety, lacks multiple elements of base claim 1 and of dependent claims 5-7. Applicants have amended the claims to more positively recite the structural limitations of Applicants' claimed inventions, and will reference the amended claim language in responding to the rejections.

Applicants' claim 1 recites:

two parts of an orthopedic joint which are movable relative to one another;

a walking aid, having a handgrip structure having a grip surface that is readily gripped by a person, and a ground contact surface, constructed and arranged such that the person can grip the grip surface and, while maintaining the grip, place the ground contact surface in contact with the ground, that is separate from said orthopedic joint;

an actuating unit integrated into said walking aid, for sending an actuating signal by wireless transmission;

a locking device, movable between a lock position and an unlock position, wherein in said lock position it engages said orthopedic joint so as to lock the two parts in a predetermined relative position and in said unlock position it permits movement of the two parts with respect to one another; and

a control unit constructed and arranged to receive said actuating signal and, in response, electromechanically actuate said locking device to at least one of said lock position and unlock position.

Claim 1, currently amended, at lines 2-18.

The novel structure defined by claim 1 provides a disabled person with a safe, reliable, convenient, ergonomically superior orthopedic aid, by structuring a prosthetic leg to have certain features and a walking aid to have other cooperating features such that the disabled person can operate and move about using the prosthetic leg and walking aid, but with a substantially reduced effort, a reduced need to remove his or her hand from the walking aid in order to lock and unlock the prosthetic joint, and a lower likelihood of an accident due to, for example, attempting to walk before the joint is locked. See Specification, at page 1, lines 10-38, and at page 2, lines 6-21 and 28-36.

Referring to claim 1, in view of Applicants' specification and drawings, the claim element of: "two parts of an orthopedic joint which are movable relative to one another" encompasses, for example, items 2 and 3 of Fig. 1 that are connected, as shown, by the pivot joint item 6.

The claim 1 "walking aid" element, with the included limitations of "handgrip structure having a grip surface that is readily gripped by a person" and "ground contact surface," encompass, for example, the walking aid illustrated in Fig. 2 as item 10, with a handgrip such as item 12, and ground contact surface, such as item 11.

The claim's "actuating unit integrated into said walking aid," as recited by the claim, encompasses any transmitter incorporated into a structure meeting the limitations of the claim 1 "walking aid" including, but not limited to, the transmitter 14 shown which, for example, can be integrated into the handgrip of the walking aid, as shown in Fig. 2.

The claim 1 "locking device" element is recited as an actuated lock device movable to a lock position, which engages the joint and locks it from moving, and to an unlock position, which permits joint motion such as, for example, the structures and operations illustrated by Figs. 3-6 and described by the specification at, for example, page 4, lines 4-17.

The claim 1 "controller unit," as recited, encompasses any device having a radio receiver, for receiving the "actuating signal" and having an electromagnetic actuator arranged close enough to a structure meeting the "locking device" limitations to actuate, or move, the locking device to the lock and unlock position in response to the signal.

Comparing claim 1 to Krahner, Applicants submit that the reference fails to disclose, teach or suggest any structure or subject matter meeting: (i) the “walking aid” element; (ii) the “actuating unit integrated into said walking unit; (iii) the “locking device” element; and (iv) the “control unit” element.

Krahner lacks the claim 1 “walking aid” element simply because there is nothing within the broadest reasonable meaning of “walking aid” found in that reference and, further, because there is absolutely nothing even remotely arguable as pertaining to a structure meeting the “handgrip” and “ground contact surface” limitations of the claim 1 “walking aid” element.

The Office Action asserts that Krahner’s items 270, 235, 230, 240, 255, 265, 275, and 260 are “integrated into a walking aid which is separate from said orthopedic joint,” and refers to Krahner, at “col. 8 lines 41-4 [sic - ?]” for support. Office Action, at page 2, last line, through page 3, line 2.

Applicants respectfully submit that the Office Action misreads Krahner; the cited passage, to the extent identifiable by Applicants, discloses a “monitoring device 210 [which] may comprise a personal computer... personal digital assistant ... cellular phones ... or the like.” Krahner, at column 8, lines 41-44. Applicants respectfully submit that none of the devices identified in the cited passage of Krahner, or any device of the general class of those exemplified by the passage, are anywhere within the broadest reasonable meaning of “walking aid.” Further, none of these devices disclosed by Krahner even arguably meet the limitations of the amended claim 1 “walking aid.”

Krahner lacks the “actuating unit integrated into said walking aid” element for two reasons. First, Krahner lacks the claim 1 “walking aid.” Krahner therefore cannot disclose anything “integrated into said walking aid.” Second, reading claim 1 as a whole, the “actuating signal” is generated by the “actuating unit,” the signal is received by the “control unit” and, in response, the control unit “electromagnetically actuate[s] the locking device to at least one of said lock position and unlock position.” Claim 1, currently amended, at lines 16-18. As Applicants submit below, Krahner lacks a “locking device,” and lacks a “control unit,” to the extent such elements are recited by claim 1. Krahner therefore cannot disclose anything within the meaning of the claim 1

“actuating signal,” because this signal is defined in accordance with the “locking device” and “control unit” of claim 1, and Krahner lacks both of these claim 1 elements.. Therefore, Krahner cannot teach, disclose or suggest the claim 1 “actuating unit.”

Krahner lacks the claim 1 “locking device” because Krahner does not teach, disclose or suggest any structure that “locks the two [orthopedic joint] parts in a predetermined relative position.” Claim 1, currently amended, at lines 12-13. (emphasis added) Krahner’s structure does not “lock” anything “in a predetermined relative position.” What Krahner teaches is a rehabilitation device comprising a “brace hinge assembly 205” having an “extension limiter 320 and a flexion limiter 325 ... [which] advantageously limit the angular range available to the hinge ... [f]or example [by setting] the extension limiter 320 ... at ten degrees and the flexion limiter 325 at forty degrees.” Krahner, at column 8, line 49, through column 9, line 9. (emphasis added).

Applicants respectfully submit that Krahner’s disclosed structure and method for limiting the range of movement of the “brace hinge assembly” are far outside the broadest reasonable meaning of the claim 1 “locking device” and its recited limitations.

Lastly, Krahner lacks the claim 1 “control unit”. There are two irrefutable reasons that Krahner lacks the claim 1 “control unit.” The first is that Krahner lacks the claim 1 “locking device.” The claim 1 “control unit” is defined as being “constructed and arranged ... to electromagnetically actuate” the claim 1 locking device. Claim 1, currently amended, at lines 17-18. Since Krahner lacks the claim 1 “locking device” Krahner simply cannot teach or disclose anything “constructed and arranged ... electromagnetically actuate” a locking device. The second reason is that even if Krahner’s “flexion limiter 325” and “extension limiter 320” are, hypothetically, juxtaposed with the claim 1 “locking device,” the fact remains that Krahner lacks any structure or device for “electromagnetically actuat[ing]” either of these “limiter[s].” Referring to Krahner’s Fig. 3, and reading entire Krahner disclosure, the only conclusion that can be reached is that the “flexion limiter 325” and “extension limiter 320” are manually set.

Applicants, for the foregoing reasons, respectfully request that the rejection of claim 1 be reconsidered and withdrawn.

Regarding claims 5-7, these are dependent on claim 1 and, therefore, are combination claims having their own recited limitations combined with all of the limitations of base claim 1. Base claim 1, for the reasons Applicants presented above, is patentable over Krahner. Therefore, dependent claims 5-7 are patentable, for at least the reasons presented above.

Further regarding claim 5, the Office Action's stated position is that "Krahner ... disclose[s] ... the actuating unit include[ing] a manual transmitter," citing Krahner's item 250 as support. Office Action, at page 3, lines 3-4. Applicants respectfully submit that the Office Action misreads Krahner, or omits consideration of Applicants' claim language. Claim 1, from which claim 5 depends, recites the actuating unit as being integrated into the walking aid. See claim 1, currently amended, at line 9. Krahner's item 250 is not disclosed, taught, or suggested, in any conceivable way, as being integrated into a walking aid. Further, base claim 1 recites the actuating unit as generating an actuating signal, and that the control unit, in response to receiving the actuating signal, electromagnetically actuates the locking device. Krahner's "flexion limiter" and "extension limiter," in addition to not meeting the claim 1 "locking device" limitations, are manually operated; they are not electromagnetically actuated.

Further regarding claim 6, the Office Action's stated position is that "Krahner ... disclose ... the control module [being] capable of transmitting ... an acknowledgement signal ... or a warning signal," citing Krahner at column 7, lines 30-34 as support. Office Action, at page 3, lines 5-7. Applicants have amended claim 6 to read as follows:

The orthopedic aid of claim 1, wherein the control module is constructed and arranged to detect completion of a movement of said locking device from said unlock position to said lock position and, in response to said detecting, to transmit an acknowledgment signal to the actuating unit.

Claim 6, currently amended.

As Applicants have submitted above, Krahner lacks the claim 1 "locking device" and lacks the claim 1 "control module" and the claim 1 "actuating unit." The passage in Krahner cited by the Office Action vaguely

describes “an audio/vibrational output 245 [that] may ... include an audio transducer or other conventional means.” Applicants respectfully submit that this passage does not constitute a teaching of the claim 1 locking device, or of the claim 1 actuating unit integrated into the walking aid, or of the claim 1 control unit, all of which are otherwise lacking in the Krahner reference. Further, the cited passage does not constitute a teaching of “the control module [being] constructed and arranged to detect completion of a movement of said locking device.” Krahner cannot teach or suggest detecting the state of a locking device because Kramer does not have or disclose a locking device. The cited passage cannot teach or disclose detection of a movement to a lock or unlock position, because Kramer does not teach or disclose a “lock or unlock position.

Further regarding claim 7, this claim depends from claim 6, which is addressed above and which, in turn depends from claim 1.

Applicants respectfully submit that the passages in Krahner that the Office Action cites, namely Fig. 2B, item 245, column 6, lines 55-67 and column 7, lines 25-32, do not constitute a teaching of the claim 6 limitations identified that Krahner lacks. Applicants further respectfully submit that these passages do not constitute a teaching of the claim 1 locking device, or of the claim 1 actuating unit integrated into the walking aid, or of the claim 1 control unit, all of which are otherwise lacking in the Krahner reference.

#### **Claims 3, 4 and 8**

Claims 3, 4 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Krahner. See Office Action at pages 4-5.

Krahner is the sole reference relied upon; the Office Action does not cite to any alleged knowledge of persons skilled in the art or to any alleged skill in the art.

Applicants respectfully traverse the rejections, on the primary ground that Krahner cannot support any tenable argument that its disclosure could actually establish *prima facie* obviousness of base claim 1.

As Applicants have submitted above, and as a fair reading of Krahner establishes, Krahner lacks: (i) the “walking aid” element; (ii) the “actuating unit

integrated into said walking unit; (iii) the “locking device” element; and (iv) the “control unit” element of base claim 1.

To establish *prima facie* obviousness of base claim 1

three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

#### MPEP § 2143

Applicants respectfully submit that Krahner fails to “teach or suggest all of the claim limitations” of claim 1 and, further, that Krahner fails to show “some suggestion or motivation ... to modify” Krahner to meet Applicants’ claim 1.

Krahner lacks the claim 1 “walking aid.” The Office Action does not cite to any suggestion or motivation found in, or from Kramer, of a “walking aid.”

Kramer lacks the claim 1 “actuating unit” element; the reference teaches nothing of a transmitter “integrated in a walking aid” and nothing a transmitter that generates the “actuating signal” as defined by claim 1. The Office Action does not cite to any suggestion or motivation found in, or from Krahner, of the claim 1 “actuating unit.”

Kramer lacks the claim 1 “locking device.” The Office Action does not cite to any suggestion or motivation found in, or from Krahner, of the claim 1 “locking device.”

Kramer lacks the claim 1 “control unit” The Office Action does not cite to any suggestion or motivation found in, or from Krahner, of the claim 1 “control unit.”

Since Kramer cannot support *prima facie* obviousness of base claim 1, it cannot support *prima facie* obviousness of any the dependent claims, including claims 3, 4 and 8.

Applicants therefore, for at least the reasons presented above, respectfully request reconsideration and withdrawal of the rejection of claims 3, 4 and 8.

Further regarding claim 3, the Office Action's position is that "it would have been obvious ... to consider cellular phone[s] to inherently have a handgrip." Office Action, at page 4, lines 7-11. Applicants respectfully respond that a "cellular phone" is not, at least based on Applicants knowledge of any current dictionary of the English language, a "walking aid." Applicants further submit that base claim 1 has been amended to recite the "walking aid" as having a ground contact surface. Applicants respectfully submit that a cell phone cannot be reasonably argued as having such structure.

Further regarding claim 4, the Office Action's position is that Krahner "disclose[s] an actuating button (260) arranged on a free end ce (see fig. 2b) of the handgrip." Office Action, at page 4, lines 12-13. Applicants respectfully respond that Krahner's item 260 is described as a "clinician communicator," see Krahner at column 7, lines 51-57, that has nothing to do with a "walking aid" or the handgrip of a "walking aid" and that nothing to do with generating anything with the meaning of the claim 1 "actuating signal." Applicants are therefore confused as to the Office Action's position that Krahner's item 260 relates to Applicants' claim 4.

Further regarding claim 8, the Office Action's position is similar to the Office Action's position with respect to claims 3 and 4. Applicants therefore respectfully repeat their statements above regarding Krahner compared to Applicants' claims 3 and 4, and claim 1 as well.

## **II. Conclusion**

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1 and 3-8 be allowed, and that the application be passed to issue.



Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Laurence E. Stein". The signature is fluid and cursive, with the first name "Laurence" being more prominent and the last name "Stein" following in a similar style.

Laurence E. Stein  
Reg. No. 35,371

Whitham, Curtis, Christofferson & Cook, P.C.  
11491 Sunset Hills Road, Suite 340  
Reston, VA 20190

Tel. (703) 787-9400  
Fax. (703) 787-7557

Customer No.: 30743